IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1   1-20.   (Canceled)

1   21.   (New) A method for providing printer recognition and management of a print

2   job entity, comprising:

3   establishing a repository of attributes and status information associated with each

4   print job that passes through a printer system;

5   providing an interface to a plurality of components to allow access to the attributes

6   and status information in the repository by the plurality of components; and

7   establishing a job monitor for managing the repository of attributes and status

8   information associated with each print job, for responding to a call by a printer component

9   and for managing interactions between printer components in order to control the processing

10 of the job.

1   22.   (New) An apparatus for providing printer recognition and management of a

2   print job entity, comprising:

3   a repository of attributes and status information associated with each print job that

4   passes through a printer system;

5   an interface to a plurality of components, the interface providing access to the

6   attributes and status information in the repository by the plurality of components; and

7   a job monitor for managing the repository of attributes and status information associated with

8   each print job, for responding to a call by a printer component and for managing interactions

9   between printer components in order to control the processing of the job. .

1   23.   (New) The apparatus of claim 22, wherein the interface provides an ability for

2   components to process a job according to requirements of the component and reports job

3   attributes and processing status of the job for common access by other components.

1   24.   (New) The apparatus of claim 22, wherein the interface provides a component

2   access to common variables, the components presenting job attributes or status to the

3   interface.

1   25.   (New) The apparatus of claim 22, wherein the a repository and interface are

2   provided by a job monitor, the job monitor further providing logical views to obtain a next

3   job to be processed by a component and to obtain a list of all jobs in the order that they are

4   processed.

1   26.   (New) The apparatus of claim 22, wherein the job monitor is used to update

2   attributes of print jobs.

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1   27.   (New) The apparatus of claim 26, wherein the job monitor determines a next

2   job to process, the component determining valid states for a call.

1   28.   (New) The apparatus of claim 27, wherein the job monitor includes a

2   multiplexor, and wherein the valid states for a multiplexer further comprise:

3   an unknown state for when a job identification is requested; and

4   a pull print queue state for the job when the job is stop-flowed at a port connection

5   manager waiting for access to the printer because a print engine is processing another job;

6   wherein the multiplexer receives the job and selects to place the job in a job must be

7   spooled state, a may spool state or must print state.

1   29.   (New) The apparatus of claim 28, wherein the multiplexer routes the

2   incoming job to the print engine or the spooler according to which becomes available first

3   when the job is a job that may spool.

1   30.   (New) The apparatus of claim 22 further comprising a spooler.

1   31.   (New) The apparatus of claim 30, wherein the spooler receiving a job

2   identification request, enters a not spooled state when the spooler has not yet processed the

3   job, enters a spooling, can despool state when the job is being written to the spool device

4   thereby allowing the job to be selected for despooling at any time, enters a spooling,

5   despooling state when the job is being written to the spool device and is also being read from

6   the spool device, enters a waiting to despool state when the end of the job has been received,

7   enters a despooling state when the job is being read from the spool device and written to the

8   multiplexer and enters the done state when the job is finished being processed by the spooler.

1   32.   (New) The apparatus of claim 22 further comprising an interpreter.

1   33.   (New) The apparatus of claim 32, wherein the interpreter enters a waiting for

2 data state when job processing by the interpreter has started, enters an interpreting state when

3 the job is being processed by the interpreter and enters a done state when the job is finished

4 being processed by the interpreter.

1   34.   (New) The apparatus of claim 22, wherein the a repository and interface are

2 provided by a job monitor, the job monitor further handling incoming jobs with a port

3 connection manager, wherein the port connection manager calls to a multiplexer to process

4 the job.

1   35.   (New) The apparatus of claim 22, wherein the a repository and interface are

2 provided by a job monitor, the job monitor further deciding whether to assign a job to the

3 printer, whether to assign a job to a spooler, whether the job must wait for available resources

4 or whether the job cannot be processed.

1   36.   (New) The apparatus of claim 22 further comprising a job monitor to fetch

2 jobs in an order that is dependent upon the calling component.

1   37.   (New) The apparatus of claim 36 further comprising a job monitor for

2 examining process job states and variables to determine the correct response and to return an

3 appropriate job identification for a job.

1   38.   (New) The apparatus of claim 22 further comprising a job monitor for

2 providing a common method of accessing the variables associated with a job for the

3 components.

1   39.   (New) An article of manufacture comprising a program storage medium

2 readable by a computer, the medium tangibly embodying one or more programs of

3 instructions executable by the computer to perform a method for providing printer

4 recognition and management of a print job entity, the method comprising:

5   establishing a repository of attributes and status information associated with each

6 print job that passes through a printer system;

7   providing an interface to a plurality of components to allow access to the attributes

8 and status information in the repository by the plurality of components; and

9   establishing a job monitor for managing the repository of attributes and status

10 information associated with each print job, for responding to a call by a printer component

11 and for managing interactions between printer components in order to control the processing

12 of the job.